

Circuits & Circuit Elements

W.E.

621.399.613 621.310.720.078 3 1306
The Synchronization (Pulling-In) of a Valve
Oscillator by a Harmonic of the Fundamental
Frequency. O. A. Ekhozhevski & B. K. Shembel
(Zh. Tekh. Fiz., 1947, Vol. 17, No. 2, pp. 215-230.
(In Russian). The oscillator with an external e.m.f. applied to it is regarded as a generator of reactive power at the fundamental frequency. Using this conception a simple formula (16) is derived determining the pulling-in range. It follows from this formula that for relatively small values of the load the range of synchronization is extended and the range of preoperation of the circuit to the order number of the harmonic of the fundamental frequency is proportional to the load and to the characteristic impedance of the circuit. Under conditions of overloading the range of synchronization is independent of the attenuation of the circuit. The main principles of the design of synchronized oscillators are discussed; experimental results fully confirm the theory.

1948

Tkhorzhevskiy, O. A.

TRANSLATION FROM: Referativnyy zhurnal, Elektrotehnika, 1957,
Nr 2, p. 260 (USSR) 112-2-4335

AUTHOR: Tkhorzhevskiy, O. A.

TITLE: Calculating the Coverage Band Width of a Vacuum Tube
LC-Oscillator Detuned on the Fundamental Frequency
Harmonic (Raschet shiriny polosy zakhvatyvaniya
rasstroyennogo lampovogo LC-generatora na garmonike
osnovnogo kolebaniya)

PERIODICAL: Vses. n.-i. in-ta metrologii, 1956, Nr 28, pp. 90-94

ABSTRACT: It is pointed out that in the practical application of synchronized LC-oscillators, under conditions of low circuit selectivity and when the value of the synchronizing e.m.f. is relatively high, a broad coverage must be obtained. This is necessary for prolonged and reliable LC-oscillator operation. A method is proposed for calculating the width of the coverage band of an LC-oscillator detuned on the fundamental frequency harmonic [when the values of the synchronizing emf are commensurate with the magnitude of the voltage produced by the oscillator]. An analysis is given of random error in determining the width of the synchronization band by the proposed formula. It was found that the relative random error in determin-

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Calculating the Coverage Band Width of a Vacuum Tube (Cont.)

112-2-4335

ing the coverage band width was directly proportional to the synchronization frequency, and inversely proportional to the relative width of the coverage band. By comparing the calculations with experimental results it was found that the calculation errors can be detected by present day harmonic analyzers.

V.Z.P.

Card 2/2

MAKASHEV, M.Kh.; TKHORZHEVSKIY, O.A.

Aging of high-Q AT-cut quartz resonators. Izm.tekh. no.5:53-54
My '63. (MIRA 16:10)

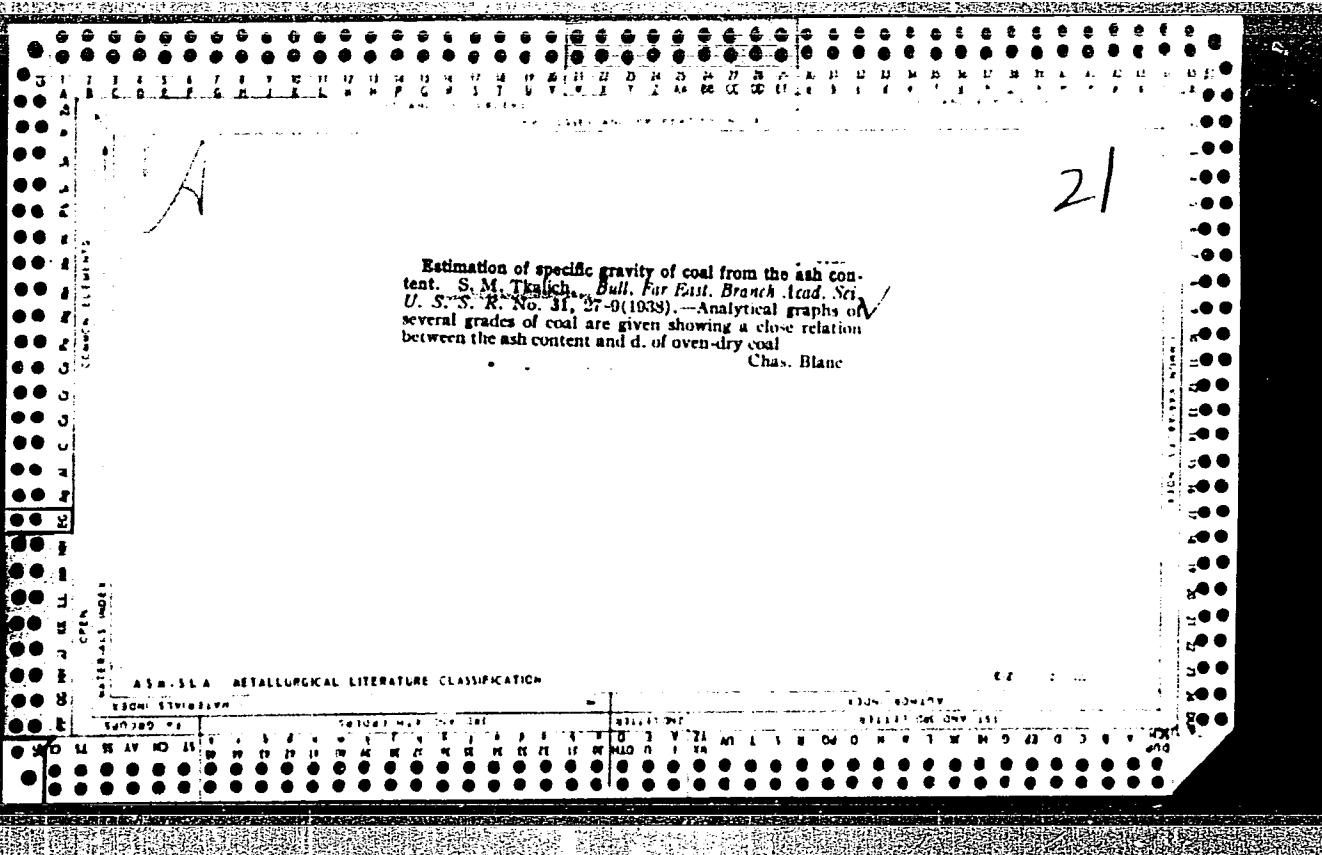
TKHORZHIVSKII, O.A.

Calculating the trapping bands of the oscillator's basic frequency
which has been stabilized by a piezoquartz element. Trudy VNIM
no.28:95-101 '56. (MIRA 10:12)
(Oscillators, Crystal)

Estimation of specific gravity of coal from the ash content. S. M. Tkachch., *Bull. Fur East. Branch Acad. Sci. U. S. S. R.* No. 31, 27-10 (1938).—Analytical graphs of several grades of coal are given showing a close relation between the ash content and d. of oven-dry coal.

Chas. Blanc

21



TKHORZHEVSKIY, C.H.

"Computation of Bandwidth of a Detuned Tube LC-Oscillator On Harmonics of the Fundamental Oscillations," by O. A. Tkhorzhevskiy, Tr. Vses. n.-i. in-ta metrologii, 1956, 28, pp 90-94 (from Referativnyy Zhurnal--Elektrotehnika, No 2, Feb 57, Abstract No 4335)

It is shown that, in the practical application of synchronized LC-oscillators with low circuit selectivity and relatively large synchronizing emf, it is necessary to have a broad bandwidth. A method of computing the width of the band is suggested, whereby the harmonic of the fundamental oscillations at values of emf commensurate with the oscillator potential is utilized. It was found that the accuracy is proportional to the synchronization and inversely proportional to the bandwidth. (U)

SUM 1/N 1467

PAN'KIV, A.M.; STERLIN, B.P.; TKHORZHEV'KIY, S.A. [Tkhorzhevs'kyi, S.A.]

Cross section of Mesozoic sediments in the Kharkov key hole.
Geol. zhur. 23 no.5:96-99 '63. (MIRA 16:12)

1. Trest Kharkivnaftogazrozvidka" i Ukr. filial VNDIGaz.

BRYNZA, N.F.; STERLIN, B.P.; TKHORZHEVSKIY, S.A.; CHIRITYAKOV, A.B.

Some characteristics of the relation of Upper Paleozoic
and Mesozoic structural plans in the West Ukrainian oil-
and gas-bearing basin. Geol. nefti i gaza 9 no.6:22-27 Je
'65. (MIRA 12:8)

1. Trest Khar'kovneftegazrazvedka i Ukrainskiy filial
Vsesoyuznogo nauchno-issledovatel'skogo instituta prirodnogo
gaza.

AGISHOV, A.P.; KLIUCHIKHO, I.F.; LAFKIN, I.Yu.; PALIY, A.M.; STERLOV, B.P.;
TKHORZEVSKII, S.A.; TKACHISHIN, S.V.

New gas-bearing area in the southeastern section of the Dnieper-
Donets Lowland. Gaz. prom. 2 no.12:4-6 '63 (MIRA 18:2)

VASIL'YEV, V.G.; VOROB'YEV, B.S.; DUDKO, N.A.; ZIL'BERMAN, V.I.; KLITCHENKO, I.F.; LI'TVINGY, V.R.; TKHORZHEWSKIY, S.A.; CHERPAK, S.I.

Present status of and prospects for the development of the production of natural gas in the eastern Ukrainian oil- and gas-bearing region. Gaz. prom. 10 no.4:1-6 '65.

(MIRA 18:5)

VOROB'YEV, B.S.; LAPKIN, I.Yu.; PAN'KIV, A.M.; STERLIN, B.P.; TKHORZHEVSKIY, S.A.

Geology of the southern slope of the Voronezh massif in the Charkov region. Sov. geol. 6 no.4:129-133 Ap '63. (MIRA 16:4)

1. Trest "Khar'kovneftegazrazvedka" i Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta gaza i iskusstvennogo zhidkogo topliva.

(Charkov region—Geology)

GRANIN, Daniil; TKHORZHEVSKIY, S.S., red.; KOMM, V.G., tekhn. red.

[Unexpected morning] Neozhidannoe utro. Moskva, Izd-vo "Sovetskiy pisatel", 1962. 129 p.
(MIRA 16:3)
(Cuba--Description and travel)

MZHEL'SKIY, V.S.; KULIK, L.N.; TKHORZHEVSKIY, V.I.

Causes of failures in the surgical treatment of varicose veins
of the lower extremities. Vest.khir. no.4:54-59 '61. (MIRA 14:4)

1. Iz 2-y gospital'noy khirurgicheskoy kliniki (nach. - prof.
Ye.V. Smirnov) Voyenno-meditsinskoy ordena Lenina akademii im.
S.M. Kirova.

(VARIX)

KHIL'KIN, A.M.; KHOREVSKIY, V.I.

Arteriopiezogram in experimental aortal insufficiency and
after its correction. Trudy 1-go MMI 16:66-71'62.
(MIRA 16:6)

1. Iz kafedry operativnoy khirurgii i topograficheskoy anatomii
(zav. - chlen-korrespondent AMN SSSR prof. V.V.Kovanov) Pervo-
go Moskovskogo ordena Lenina meditsinskogo instituta.
(AORTIC VALVE—DISEASES) (PULSE)

L 17612-65
Pa5-107/Ps-4/rt-1C
1964/1965 - 1966

-56-4/

ACCESSION NR AM4046718

BOOK EXPLOITATION

5/

Tkhorzhevskiy, V. P.; Perevezentsev, I. G.

Construction of instruments for countries with tropical climates (Konstruirovaniye priborov dlya stran s tropicheskim klimatom), 2d ed., rev. and enl., Moscow, Izd-vo "Mashinostroyeniye", 1964, 100 p., illus., bibliogr., tables. 3,100 copies printed.

TOPIC TAGS: tropical deterioration, metal corrosion, organic coating, packing material, metallic coatings, nonmetallic coatings, electric insulation

SYNTHETIC COVERAGE: The book reports on the design of new and the redesign of old instruments for countries with tropical climates. The basic design rules of instruments, the selection of materials, the use of packing are considered. The norms and methods of tropical climatic testing are given. The book is intended for technical workers of plants and design bureaus as a manual.

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ACCESSION NR AM404671B

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ACCESSION NR AM404671^a

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SUB CODE: MM, MT, IC, OC

SUBMITTED: 25Feb64

NR REF SCV: 091

OTHER: 020

Card 3/3

TKHORZHEVSKIY, V.P.; PEREVEZENTSEV, I.G.; MADISON, V.G., retsenzent;
STROGANOV, L.P., inzh., red.

[Design of instruments for countries with a tropical
climate] Konstruirovaniye priborov dlia stran s tropiche-
skim klimatom. Izd.2., perer. i dop. Moskva, Izd-vo Ma-
shinostroenie, 1964. 199 p. (MIRA 17:6)

PHASE I BOOK EXPLOITATION

SOV/4839

Tkhorzhevskiy, Vladislav Pavlovich, and Ivan Gavrilovich Perevezentsev

Konstruirovaniye priborov dlya stran s tropicheskim klimatom (Design of Instruments for Countries With Tropical Climates) Moscow, Mashgiz, 1960. 153 p. 2,500 copies printed.

Reviewer: M.D. Kuzin; Ed.: Yu. M. Khlepetin; Executive Ed. (Ural-Siberian Department, Mashgiz): T.M. Somova, Engineer; Tech. Ed.: N.A. Dugina.

PURPOSE: This book is intended as a reference manual for technical personnel of factory and design offices.

COVERAGE: The book deals with experience gained in designing and rebuilding instruments for use in countries with tropical climates. The authors present basic rules for selecting instrument design and for matching materials used in production, and discuss the preservation and packing of these instruments. Special features of manufacturing such instruments are also described. The authors have drawn upon their experience in designing instruments for use in India and Burma. No personalities are mentioned. There are 41 references: 30 Soviet, 6 English, 4 German, and 1 French.

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TKHORZHEVSKIY, Vladislav Pavlovich; PEREVEZENTSEV, Ivan Gavrilovich;
KUZIN, M.D., retsenzent; KHLEPETIN, Yu.M., red.; DUGINA, N.A.,
tekhn.red.

[Manufacture of instruments for tropical countries] Konstruiro-
vaniye priborov dlja stran s tropicheskim klimatom. Moskva, Gos.
nauchno-tekhn.izd-vo mashinostroit.lit-ry. 1960. 153 p.
(MIRA 13:10)

(Instrument manufacture)

ACC NR: AP6032500 (A) SOURCE CODE: UR/0413/66/000/017/0054/0054

INVENTOR: Tkhorzhevskiy, V. V.

ORG: none

TITLE: Device for simulating the control mechanism of a cell. Class 30,
No. 185439

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966,
54

TOPIC TAGS: direct current, circuit breaker, electrolytic cell, electrolyte,
control mechanism, simulation, modeling, model

ABSTRACT: An Author Certificate has been issued describing a device for modeling
the control mechanism of a cell, containing a variable resistance element, a d-c
supply, and circuit breakers for individual network elements. To simulate the
inhibitor processes using the end product, the variable resistance element is made
in the form of an electrolytic cell. To control the density of the electrolyte in the
electrolytic cell, electrolytic sources of different densities with adjustable rectifiers

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UDC: 615.47:612.813.3

ACC NR: AP6032500

and electromagnetic relays are installed in the device (see Fig. 1). Orig. art. has: 1 figure. [Translation]

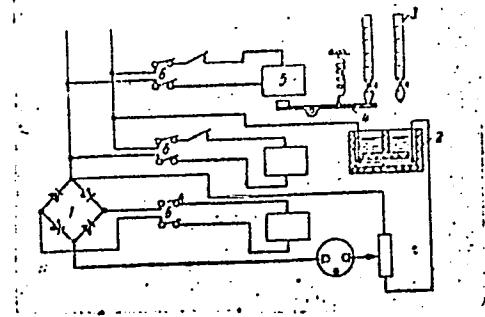


Fig. 1. Device for simulating the control mechanism of a cell
1—Direct current supply;
2—electrolytic cell; 3—electrolyte source; 4—adjustable rectifier; 5—electromagnetic relay; 6—breakers in the relay circuit.

SUB CODE: 13, 20 / SUBM DATE: 16Dec64/

Card 2/2

TKHOSTOV, B.

Information about the Kazan conference on geology. Geol. nefti 2
no. 6:66-71 Je '58. (MIRA 11:7)
(Geology)

TKHOSTOV, B.A.

Afghanistan. Geol. nefti l no.9:61-64 3 '57.
(Afghanistan--Petroleum geology)

(MIA 10:9)

TKHOSTOV, Batraz Agubegirovich; VATOLIN, G.N., vedushchiy red.;
TROFIMOV, A.V., tekhn.red.

[Initial formation pressures in oil and gas fields] Nachal'nye
plastovye davleniya v neftianykh i gazovykh mestorozhdeniakh.
Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry,
1960. 105 p.
(Oil reservoir engineering)

MUSTAFINOV, A.N.; TKHOSTOV, B.A.

Structural drilling in the R.S.F.S.R. in the complex prospecting plan for 1959-1965. Geol.nefti i gaza 3 no.11:1-6
(MIRA 13:3)
N '59.

1. Gosplan RSFSR.
(Boring)

TKHOSTOV, B.A.

Results of oil and gas prospecting in the R.S.F.S.R. in 1960.
Geol. nefti i gaza 5 no. 3:1-6 Mr '61. (MIRAL4:4)

1. Gosplan RSFSR.
(Petroleum geology) (Gas, Natural--Geology)

TKHOSTOV, B.A.

Results of prospecting for oil and gas in the R.S.F.S.R., 1961.
Geol.nefti i gaza 6 no.3:1-6 Mr '62. (MIRA 15:4)
(Petroleum geology) (Gas, Natural--Geology)

TKHOSTOV, B.A.; L'VOV, M.S.

Limits of maintaining oil production with commercial
reserves. Geol. nefti i gaza 6 no.12:8-15 D '62. (MIRA 15:12)

1. Gosplan RSFSR i Gosudarstvennoye nauchno-tehnicheskoye
izdatel'stvo neftyanoy i gorno-toplivnoy literatury.
(Oil fields--Production methods)

AVROV, V.Ya.; BLINNIKOV, I.A.; BROD, I.O.[deceased]; BUYALOV, N.I.;
VASIL'YEV, V.G.; DMITRIYEV, Ye.Ya.; YELIN, N.D.; YEROFEYEV,
N.S.; ZUBOV, I.P.; KALININ, N.A.; KULRYASHOVA, N.M.; MAKSEMOV,
S.P.; L'VOV, M.S.; MIRCHINK, M.F.; OVCHINNIKOVA, T.G.;
SIMAKOV, S.N.; TROFIMUK, A.A.; TROSTOV, B.A.; FEDOTOVA, M.I.,
ved. red.

[Predicting gas potential of the U.S.S.R.] Prognoz gazonosno-
sti SSSR. Leningrad, Gostoptekhizdat, 1963. 175 p.
(MIRA 17:4)

TKHOSTOV, B.A.; L'VOV, M.S.; VASIL'YEV, V.G.

Principles for the prospective planning of production and an increase in the oil and gas reserves. Geol. nefti i gaza 8 no.8:1-7 Ag '64. (MIRA 17:8)

1. Gosplan RSFSR, Izdatel'stvo "Nedra" i Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza.

TKHOSTOVA, V.T.

Method of analysis of the activity of the city hospital's polyclinic. Zdrav. Tadzh. 10. no.1:27-32. '63. (MIRA 16:7)

1. Iz kafedry organizatsii zdravookhraneniya i istorii meditsiny (zav.-dotsent Ya.T.Tadzhiev) Tadzhikskogo meditsinskogo instituta imeni Abuali ibni Sino.
(CLINICS)

BURSHTAR, Mikhail Samuilovich; MASHKOV, Igor' Vasil'yevich;
TKHVOSTOV, B.A., kand. geol.-miner. nauk, red.; YUNGANS,
S.M., ved. red.; VORONOVA, V.V., tekhn. red.

[Conditions governing the formation and characteristics of
the distribution of oil and gas pools as revealed by the
study in Ciscaucasia and the Crimean steppes] Usloviia for-
mirovaniia i zakonomernosti razmeshcheniiia zalezhei nefti i
gaza (na primere Predkavkaz's'ia i stepnogo Kryma). Moskva,
Gostoptekhizdat, 1963. 264 p. (MIRA 16:7)

(Caucasus, Northern--Petroleum geology)
(Caucasus, Northern--Gas, Natural--Geology)
(Crimea--Petroleum geology)
(Crimea--Gas, Natural--Geology)

VASIL'YEV, V.G.; ZUBOV, I.P.; TKHOSTOV, B.A.

Principal results of prospecting for oil and gas in the
U.S.S.R. in 1962. Geol. nefti i gaza 7 no.3:1-9 Mr '63.
(MIRA 16:4)

(Prospecting)

TKHOSTOV, B.A.; DUBININ, A.Z.; OVANESOV, G.P.; SAVEL'YEV, I.V.

Results of geological prospecting for oil and gas in the
R.S.F.S.R. for 1963. Geol. nefti i gaza 8 no.3:1-9 3 Mr '64.
(MIRA 17:6)

1. Gosplan RSFSR i Vserossiyskiy sovet narodnogo khozyaystva
RSFSR.

TKHOSTOVA, V.T.

Frequency of tuberculosis relapses among persons of the
control (III) group of dispensary records. Zdrav. Tadzh.
10 no.5:3-7 '63. (MIRA 17:2)

1. Iz kafedry organizatsii zdravookhraneniya i istorii
meditsiny (zav. - dotsent Ya.T. Tadzhiev) Tadzhikskogo
meditsinskogo instituta i Tadzhikskogo respublikanskogo
protivotuberkuleznogo dispansera (glavnnyy vrach S.M.
Sazonova).

TKOCZ, Josef

Faulty working methods as causes of accidents. Rudy i
metale 9 no. 8:453-456 Ag '64.

TLACH, D.

CZECHOSLOVAKIA

NOVAK, M; TLACH, D.

First Tuberculosis Ward of the Faculty Hospital
(I. Tuberkulozni oddeleni fakultni nemocnice),
Brno-Bonunice - (for all)

Prague, Rozhledy v Tuberkulose, No 2, 1963, pp 89-105

"The Causes of Death in Patients with Tuberculosis Treated
at Brno-Bohunice Hospital during 1954-1960."

CHIN' VAN TKHIN'; Prinimali uchastiye: TKHUAN, D.S.; TKHUAN, Kh.T.

Epizootiological characteristics of swine helminthiases in
the Democratic Republic of Vietnam, Veterinariia 39 no.10:
31-32 O '62. (MIRA 16:6)

1. Sel'skokhozyaystvennyy institut Demokraticeskoy Respubliki
Vietnam.

(Vietnam, North--Parasites--Swine)
(Vietnam, North--Nematoda)

TLAGA, F.

"For a larger crop of potatoes." p. 8
(Plon, Vol 4 No 4 Apr 53 Warszawa)

SO: Monthly List of East European Acquisitions, Vol 2 No 9 Library of Congress Sept 53 Unclassified

TLALKA, Alicja

"Register of water springs in Hungary" by H.Kessler. Reviewed by
Alicja Tlalka. Przegl geogr 35 no.4:747-749 '63.

1. Instytut Geograficzny, Uniwersytet Jagielloński, Krakow.

TLALKA, Radomir

Spectrographic determining of trace admixtures in radioisotopes
 P^{32} , S^{35} , I^{131} . Jaderna energie 9 no. 5:168 My '63.

1. Ustav jaderneho vyzkumu, Ceskoslovenska akademie ved, Rez u
Prahy

TLALKA, Radomir

Chromatography on spectrographic carbon according to Hafka.
Jaderna energie 10 no.7 1964

1. Institute of Nuclear Research, Rez.

TLALKA, R.

Chromatography on spectrographic carbon according to Hafka.
Coll Cz Chem 30 no.5:1433-1440 My '65.

1. Institute of Nuclear Research of the Czechoslovak Academy of
Sciences, Rez near Prague. Submitted March 21, 1964.

7.17.00

42995
S/035/62/000/011/029/079
A001/A101

AUTHOR: Tlamicha, A.

TITLE: An aerial system suitable for solar radio-spectrographs

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 11, 1962, 55 -
56, abstract 11A399 ("Byul. astron. in-tov Chekhoslovakii", 1961,
v. 12, no. 6, 255, English)

TEXT: A broad-band aerial system was constructed and measured; it consists of two spiral-beam antennas in the focus of a 7.5-m parabolic reflector. The results of these measurements are described. Each beam has 4 turns; impedance at output is equal to 70 ohm; two antennas were adjusted for operating in phase. The antenna pattern in the horizontal and vertical planes was measured with the use of solar radio emission. The pattern width between the half-power points amounted to 2° in the horizontal and 3° in the vertical plane. These values were obtained at a frequency of 808 Mc. The band width of the aerial system was 340 Mc (470 - 810 Mc). Side lobes had directivity which was 15 decibel below that of the main lobe. All these characteristics are obtained only

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An aerial system suitable for solar radio-spectrographs

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A001/A101

after a very precise adjustment of spiral beams. A small inaccuracy in the length of a turn may cause a great change in the antenna pattern. At an inaccurate adjustment, four lobes may turn out practically equal in the sense of directivity.

V. Yesipov

[Abstracter's note: Complete translation]

Card 2/2

TLAMICHA, A.; OLMR, J.

Catalog of 231 Mc/s solar radio noise storms (Ondrejov
1959-1961). Biul astr Cz 15 no. 4:133-135 '64.

1. Astronomical Institute, Czechoslovak Academy of
Sciences, Ondrejov.

TLAMICHA, A.; KONECNY, Z.

Broad band noise generator. Biul astr Cz 15 no. 4:136-137
'64.

1. Astronomical Institute, Czechoslovak Academy of Sciences,
Ondrejov (for Tlamicha). 2. J.E.Purkyne University, Brno
(for Konecny).

3.1730

31459

S/035/62/000/004/018/056
A001/A101

AUTHORS: Křivský, L., Tlamicha, A.

TITLE: Emission of the 1960 May 13 flare and absorption of cosmic noise

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 4, 1962, 59,
abstract 4A474 ("Byul. astron. in-tov Chekhoslovakii", 1960, v. 11,
no. 6, 238-241, English, Russian summary)

TEXT: A cosmic noise receiver was put into operation at the observatory in Ondrjeyova for recording at a frequency of 30.70 Mc cosmic radio emission from the region around the North Star. The receiver makes it possible to study indirectly corpuscular emission from the flares, since the latter affects the ionosphere state and causes absorption of cosmic noise emission. On May 13, 1960, an intense flare was observed in H α light; simultaneously were registered radio emission on meter and decimeter waves, atmospherics and cosmic noise level. The records were compared of the following phenomena: width of H α line in emission, intensity of solar radio emission at waves of 37.56 and 130 cm, the curve of the course of sudden atmospheric disturbances at a frequency of 27 kc, ✓

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Emission of the 1960 May 13 flare ...

S/035/62/000/C04/012/056
A001/A101

and the curve of the course of cosmic noise absorption (30.70 Mc); this characterizes their close correlation and characteristic temporal regularities of this correlation.

V. Yesipov

[Abstracter's note: Complete translation]

Card 2/2

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3.1710

40452
S/035/62/000/009/015/060
A001/A101

AUTHOR: Tlamicha, A.

TITLE: Solar radio telescope at a wavelength of $\lambda = 37$ cm

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 9, 1962, 52 - 5,
abstract 9A275 ("Byul. astron. in-tov Chechoslovakii", 1961, v. 12,
no. 4, 126 - 130. English; Russian summary)

TEXT: A radio telescope at a wavelength $\lambda = 37$ cm was put into operation in the Astronomical Institute, AS of Czechoslovakian SSR, at Ondrejova on May 1, 1957. Observations of the Sun are conducted regularly. The radio telescope antenna is a parabolic mirror of 7.5 m in diameter. A semi-wave dipole with a round reflector is used as an emitter. Directivity diagram for a half of power, taken on a transit of the Sun, is $3.25^\circ \times 5.25^\circ$. The receiver is a superheterodyne, band width $\Delta f = 1$ Mc; noise coefficient = 15. The radiometer is calibrated by the noise diode. The method of estimating the absolute magnitude of the solar radio emission flux is described. The wavelength was selected taking into account certain ranges of the solar radio emission observed at the other stations. Bursts of radio emission of the Sun at different wavelengths are compared. There are 5 references.

[Abstracter's note: Complete translation]

V. Nagnibeda

Card 1/1

s/269/63/000/004/012/030
A001/A101

AUTHOR: Tlamicha, A.

TITLE: Noise storms on wavelength 56 cm

PERIODICAL: Referativnyy zhurnal, Astronomiya, no. 4, 1963, 44, abstract
4.51.372 ("Byul. astron. in-tov Chekhoslovakii", 1962, v. 13, no. 3,
121 - 122, English)

TEXT: This is a brief report on noise storms, unusual for decimeter wave-lengths, related to solar activity, which were observed at the Ondrzejov Observatory. Only three such cases (July 23, 1955, April 2, 1960, November 10, 1960) were recorded from 1956 to 1960 (1,700 observational days with 9 hours each), when the records of radio radiation on wavelength 56 cm was similar to records of a noise storm on the meter wavelengths. Examples of records are presented. There are 6 references.

M. G.

[Abstracter's note: Complete translation]

Card 1/1

TLAMICHA, A.; KRVISKY, L.; OLMR, J.

Classification of solar radio storms in the meter range and
their frequency 1959-1961. Biul astr Cz 15 no.2:49-52 '64.

1. Astronomical Institute, Czechoslovak Academy of Sciences,
Ondrejov.

TLAMICHA, A.

Unusual decrease of solar radio emission on the 56cm wave-length
during the May 13, 1960 flare. Biulleten astron inst 14 no.1;24
'63.

1. Astronomical Institute of the Czechoslovak Academy of Sciences,
Ondrejov.

TLAMICHA, A.

An aerial suitable for radiospectrographs. Biul astr Cz 14
no.3:107-110 '63.

1. Astronomical Institute of the Czechoslovak Academy of
Sciences, Ondrejov.

PROKSCH, Karel, inz.; TLAMSA, Jiri, inz.

The reed relay. Slaboproudý obzor 24 no.10:606-611 0 '63.

1. Vyzkumny ustav telekomunikaci, Praha.

MICHALICA, K., inzh.; TLAMSA, Jiri, inz.

At the door of a new technology in telecommunication installations.
Cs spoje 8 no.4:16-17 Ag '63.

1. Technicka ustredna spoju (for Michalica). 2. Vyzkumny
ustav telekomunikaci (for Tlamsa).

Z/019/63/020/002/006/006
E073/E335

AUTHORS: Tlamsa, J. and Nussberger, J.

TITLE: Influence of organic vapors on contacts in
radio engineering

PERIODICAL: Energetika i elektrotechnika. Přehled technické a
hospodářské literatury, v. 20, no. 2, 1963, 83,
abstract E63-1112 (Sborník prací výzkumného ústavu
telekomunikací (Collection of papers of the Tele-
communications Research Institute), 100 - 115)

TEXT: A study of the influence of organic vapors on contacts
in communication engineering supplemented certain experimental results
published in foreign literature. Organic vapors reduce the
reliability and service life. By chemical activation they
encourage the loss of metal by transient evaporation and thus
accelerate electric erosion of the contacts. Guiding principles
have been evolved for designing and selecting materials for communica-
tion equipment to reduce the unfavorable influence of organic
vapors to an acceptable level. There are 8 figures, 6 tables
and 10 references. [Abstracter's note: complete translation.]

Card 1/1

PROKSCH, Karel,inz.; TLAMSA, Jiri,inz.

The new Tesla telephone relay. Slaboproudý obzor 22 no. 5:275-281
'61. (EEAI 10:7)

1. Vyzkumny ustav telekomunikaci, Praha.
(Telephone) (Electric relays)

CZECHOSLOVAKIA / Farm Animals. Domestic Fowl.

Q

Abs Jour: Ref Zhur-Biol., No 9, 1958, 40505.

Author : Vondrak J., Tlaskal, J.

Inst : Not given.

Title : New Data on the New Hampshire Breed of Hens.

Orig Pub: Drubeznictvi, 1957, 5, No 9, 133-134.

Abstract: Experiments showed that the average weight of the New Hampshire chickens at the age of 2, 4, 6, 8, 10, and 12 weeks was 97, 268, 484, 844, 1,382 and 1,830 g., and that of Rhode Island chickens was 96, 225, 378, 588, 1,091, and 1,399 g., respectively. It is recommended to increase the stock of the New Hampshire hens and to standardize them according to the local conditions.

Card 1/1

Tlaskal, J.

CZECHOSLOVAKIA/Farm Animals. Domestic Fowls.

Q

Abs Jour: Ref Zhur-Biol., No 4, 1958, 16828.

Author : Orel V., Tlaskal J., Hampl J., Horsak J.

Inst :

Title : Meat-Type Breeds of Chicken
(Myasnyye porody kur)

Orig Pub: Drubeznicstvi, 1957, 5, No 6, 89-90.

Abstract: No abstract.

Card : 1/1

TLATOV, S.B.

Treatment of dilatation of the spermatic cord veins by plastic surgery
of the scrotum. Urologia 24 no.4:45-47 Jl-Ag '59. (MIRA 12:12)
(SPERMATIC CORD blood supply)
(SCROTUM surgery)

TLATOV, S.B.

Etiology of phlegmon of the intestine and of ileitis. Klin.med. 37
no.11:121-122 N '59. (MIRA 13:3)
(ASCARIASIS compl.)
(INTESTINES diseases)
(ILEITIS etiology)

TLATOV, S.B.

Strangulation of the vermiform appendix in the hernial sac in
congenital inguinal hernia. Sov.med. 22 no.7:125-126 J1'58
(HERNIA, INGUINAL, compl. (MIRA 11:10)
congen., with strangulation of appendix in hernial sac.
(Rus))
(APPENDIX,
strangulation in hernial sac. in congen. inguinal
hernia (Rus))

GRIBKOV, V. I.; TLATOV, S. B.

Case of arterial hemorrhage in tuberculous infection of the endo-thoracic lymph nodes. Probl. tub. no.2:100-101 '62.
(MIRA 15:2)

(HEMORRHAGE) (LYMPHATICS—TUBERCULOSIS)

TLATOV, S.B.

Chills as an early symptom in perforated peritonitis. Klin.
med. 38 no.11:113-114 N '60. (MIRA 13:12)
(PERITONITIS)

TLATOV, S.B. (Vladimir-Volynskiy)

Modified Dieterich's splint. Ortop. travm. i protez, 18 no.6:44
N-D '57.

(MIRA 11:4)

(SPLINTS
Dieterich's splint modification)

TLATOV, S.B. (Vladimir-Volynsk)

Suture of the skin of the scrotum immobilized by a wooden stick.
Nov.khir.arkh. no.2:78-79 Mr-Ap '57. (MLRA 10:8)
(SCROTUM--SURGERY) (SUTURES)

TIATOV, S.B. (Vladimir-Volynskiy)

Therapeutic supporting bridge-like plaster bandage with a removable
posterior plaster languet. Ortop., travm. protez. 17 no.5:51 S-0 '56.
(BANDAGES AND BANDAGING) (MILRA 10:1)

TLATOV, S.B.

Case of surgical treatment for fracture of the sternum. Ortop.
travm.i protez. no.6:67-68 '61. (MIRA 14:8)
(STERNUM--FRANCE)

TIATOV, Sz.B.

Surgical treatment of dilated veins of the spermatic cord by plastic surgery on the scrotum. Magy. sebeszet 12 no.2:139-143 Mar 59.

1. Fellep a Meghetegedes vagy nem. ilyen vagy olyan formaban nyilivanul e meg az. az adott eloleny idegrendszeri tipusatol fugy. I.P. Pavlov.

(SPERMATIC CORD, blood supply

..... dilated veins, plastic surg. of scrotum in repair (Hun))
(SCROTUM, surg.

plastic, in repair of dilated veins of spermatic cord (Hun))

815. Extinguishing of fluorescence and metastable triplet states. A. V. Kuznetsov, A. N. Tsvetin. *Izv. Akad. Nauk. SSSR. Ser. Fiz.*, 1959, No. 9, p. 17 (Jan.-Feb., 1959). In Russian.

An investigation has been started.

An investigation has been carried out of the extinguishing by O₂ of the fluorescence of anthraquinone and 24 of its derivatives, both in vapour and adsorbed state, at a very high level. Table 1 gives certain the following data for anthraquinone, anthrone, anthranilic, β -methylanthraquinone, β -oxyanthraquinone, α -oxyanthraquinone, β -aminoanthraquinone, γ -aminobenzoquinone, 1,4-dioxanthraquinone, 1,4-dioxyanthraquinone, 1,2,4-trioxyanthraquinone, 1,2,5-tetraoxyanthraquinone, 1,5-diaminoanthraquinone, and 1,2-diaminoanthraquinone: (1) max. of the fluorescence spectrum of the vapour, *In vac.*; (2) degree of extinguishing by O₂ in vapour, and adsorbed state; (3) duration of the state of excitation of molecules (sec.). Extinguishing is completely reversible: removal of O₂ reproduces the initial intensity of fluorescence. Extinguishing depends sharply and selectively on the position of the sub-

stituting group; groups NH_2 , OH , CH_3 in β position produce strong extinguishing by O_2 . If the substituting group is in a position or if there are more substituting groups, no extinguishing can be observed. Extinguishing cannot be due to a chemical process, it is a physical effect rather a quasi-chemical process, as in a purely physical process the degradation of electron energy to the motion of heavy nuclei would be extremely improbable. A theory is advanced explaining the extinguishing by O_2 as being due to two essential factors: (1) the O_2 molecule contains in its normal state (triplet electron level) 2.2 odd electrons which (a) impart to that molecule the nature of a radical (O_2^{\cdot} -radical) with unsaturated valencies, hence capable of a reaction of addition, and (b) impart to the O_2 molecule paramagnetic properties; (2) the excited molecule of the fluorocarbon compound is capable of passing from the valency-saturated state (paired electrons) into the triplet electron state.

J. RAUHMAN

ASME METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755930005-6"

TLEGENOV, K. B., Cand Phys-Math Sci -- (diss) "Mechanisation of the numerical solution of differential equations." Baku, 1960. 10 pp; (Committee of Higher and Secondary Specialist Education of the Council of Ministers Azerbaijan SSR, Azerbaijan State Univ im S. M. Kirov, Kazan State Pedagogical Inst im Abaya); 100 copies; price not given; (KL, 18-60, 146)

TLEVENOV, K.B.

Mechanized solution of certain systems of linear differential
equations with constant coefficients. Izv. AN Kazakh. SSR. Ser.
mat. i mekh. no.6:87-96 '57. (MIRA 11:4)
(Differential equations, Linear) (Matrices)

TLEGENOV, K.B.

Solvability of a polynomial by a homogeneous operational cycle.
Izv. AN Kazakh. SSR. Ser. mat. i mekh. no. 6:97-107 '57. (MIRA 11:4)
(Polynomials) (Calculating machines)

MUKHAMEDZHAPOV, S.M.; SHAYMERDENOV, N.R.; TLEKIN, S.T.; DZHUMABAYEV, M.S.

Formation of the underground waters of Cretaceous sediments in
the Irtysh Valley portion of Kazakhstan. Trudy Inst. geol. nauk
AN Kazakh.SSR no.14:143-161 '65. (MIRA 19:1)

TLEUBERGENOVA, G.; MOROZOVA, P.

Nuclear interactions of secondary nuclear-active particles in a
photoemulsion. Trudy Inst. iad. fiz. AN Kazakh. SSR 5:83-87 '62.
(MIRA 15:4)

(Photography, Particle track) (Nuclear reactions)

S/707/62/005/000/005/014
D290/D308

AUTHORS: Tleubergenova, G. and Morozova, P.

TITLE: Nuclear interactions of secondary nuclear active particles in photo-emulsions

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki. Trudy, v. 5. Alma-Ata, 1962. Fizika chastits vysokikh energiy. Struktura yadra, 83-87

TEXT: The secondary nuclear active particles were produced by the interaction of primary 9 Bev protons with the nuclei of photo-emulsions. The emulsion (thickness 400μ) was used both as absorber and detector. The number of secondary stars produced in the absorber by fast secondary charged and neutral nuclear particles increases approximately uniformly with the thickness of the absorber (up to 6-8 cm thick); the mean ratio of the number of secondary stars in the final layer to the number in the initial layer is 1.59 ± 0.26 . The equivalent ratio for the stars produced by the primary beam is 0.75 ± 0.13 ; therefore the total number of stars does not

Card 1/2

S/707/62/005/000/005/014

D290/D308

Nuclear interactions ...

vary appreciably with absorber thickness (up to 6-8 cm) as the weakening of the primary beam is compensated by the production of secondary stars. The mean number of fast charged particles per star increases as the energy of the initial particle increases. There are 2 tables and 5 figures.

Card 2/2

5(2)

AUTHOR: Tleubergenova, G.

SOV/75-14-2-12/27

TITLE: Determination of the Thorium-uranium Ratio in Minerals and Ores by Means of Thick-layer Photoplates (Opredeleniye otnosheniya toriya k uranu v mineralakh i rudakh pri pomoshchi tolstosloynykh fotoplastinok)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 2, pp 211-216 (USSR)

ABSTRACT: The method of thick-layer photoplates may be used for evaluating the quantity of radioactive elements in various objects (Refs 7, 9). For this purpose the samples were given a certain shape (transparent cuts, sections, etc). The determination of the relative uranium- and thorium content is possible by measuring the range of α -particles in the photo-emulsion. RaC', AcA and ThC' emit α -particles of high energy. The α -particles emitted by RaC' (uranium disintegration series) differ from the α -particles emitted by ThC' (thorium disintegration series) by their initial energy and consequently also by their range in the air which for both α -particles amounts to 6.91 cm and 8.57 cm at 15° and atmospheric pressure.

Card 1/4

Determination of the Thorium-uranium Ratio in Minerals and Ores by Means
of Thick-layer Photoplates

SOV/75-14-2-12/27

For the medium range of the α -particles in a photoemulsion of the type A-2 Nr 2289 NIKFI the measurements performed by the author yielded 38.5μ for RaC' and 47.3μ for ThC'. The difference by 9μ makes it possible to distinguish between the amounts of α -particles originating from RaC' and ThC' with sufficient accuracy. Consequently, the relative thorium- and uranium content in the sample may be determined. The concentration ratio between thorium and uranium is computed according to the following equation:

$$\frac{c_{Th}}{c_U} = \frac{3.3}{n_2/n_1 - 0.8}$$

c_{Th} , c_U - concentrations of Th and U

n_1 - number of α -particles the range of which in the air is > 7 cm

n_2 - number of α -particles the range of which in the air is between 5.8 and 7 cm.

Card 2/4

SOV/75-14-2-12/27

Determination of the Thorium-uranium Ratio in Minerals and Ores by Means
of Thick-layer Photoplates

The derivation of this equation is described in this paper. The method elaborated by the author makes it possible to determine the thorium-uranium ratio for values of $C_{Th}/C_U < 3$ with an accuracy of up to 10 - 15%. The maximum relative error of determination does not surpass 20% at a ratio of $C_{Th}/C_U > 10$. The working methods for the determination are described in detail in this paper. The results of the determination of the ratio of C_{Th}/C_U in 20 minerals are summarized in a table. The same table also contains experimental conditions as well as a comparison of the results of analyses obtained by chemical and radiochemical methods. By means of the method devised the fluctuation of the concentration ratio of C_{Th}/C_U in inclusions of the minerals auerlite and aktyuzite are investigated. The results of these investigations are tabulated. The method makes it possible to determine the ratio of C_{Th}/C_U in cuts with a surface of only

Card 3/4

SOV/75-14-2-12/27

Determination of the Thorium-uranium Ratio in Minerals and Ores by Means
of Thick-layer Photoplates

0.1 mm² and a weight of 0.3 mg. Therefore, it is very well suited for the analysis of small inclusions. The author thanks V. I. Baranov and A. I. Tugarinov for valuable advice. There are 2 tables and 10 references, 4 of which are Soviet.

ASSOCIATION: Fiziko-tehnicheskiy institut AN KazakhSSR, Alma-Ata
(Physico-technical Institute of the AS Kazakhskaya SSR, Alma-Ata)

SUBMITTED: April 18, 1957

Card 4/4

TAKIBAYEV, Zh.S., akademik; TLEUBERGENOVA, G.; SHALAGINA, Ye.V.

Emission of helium particles in interactions between high-energy pions and nucleons and complex nuclei. Dokl. AN SSSR 156 no. 4:785-788 Je '64. (MIRA 17:6)

1. Kazakhskiy gosudarstvennyy universitet im. S.M.Kirova.
2. AN KazSSR (for Takibayev).

Tleubergenova, G.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry.

D.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30393

Author : Baranov, V.I., Tleubergenova, G.

Inst :

Title : Use of the Method of Microradiography Utilizing Liquid Emulsions in the Study of the Content and Distribution of Radioactive Elements in Rocks

Orig Pub : Geokhimiya, 1956, No 2, 62-67

Abst : The method which has been developed for utilizing liquid emulsions in the study of the content and distribution of radioactive elements in rocks, consists in a direct application of the emulsion to the polished section of rock. In this work liquid emulsion of type A₂ was utilized. Surface of the sections was cleaned with ethyl alcohol prior to coating. Emulsion is applied to the section dropwise, and is uniformly distributed over the entire surface of the section. For a

Card 1/2

USSR/Cosmochemistry - Geochemistry. Hydrochemistry.

D.

Abs Jour : Ref Zhur - Khimiya, No 9, 1957, 30393

surface of 5 cm, 5-6 drops are sufficient. The section coated with the emulsion was dried, at room temperature, for 1-1.5 day, after which thickness of the emulsion layer was of 11-13. Uniform development in depth of the emulsion layer is necessary and is effected by means of amidol developer. Study of transparent sections of the rock, coated with emulsion, was conducted with a MBI-1 microscope at 600x magnification. This method permits to investigate the distribution of radioactive elements within objects of low activity ($10^{-3}\frac{1}{2}$ U). The method was used to investigate specimens of quartz porphyry and of other rocks. A chart of the distribution of radioactive inclusions has been prepared. In quartz porphyry 2 generations of radioactive inclusions are clearly manifested; one of them is an early, concurrent formation of porphyry separations; the other is a later formation concomitant with the main body of the rock.

Card 2/2

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755930005-6

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755930005-6"

TLEUBERGENOVA, G.

Studying the fading of latent α -particle images. Vest. AN
Kazakh. SSR 12 no. 8:93-94 Ag '56. (MLRA 9;12)

(Photography--Negatives)

TLEUBERGENOVA, G.; BOTVIN, V.

Splitting of heavy and light nuclei of an emulsion by protons
with an energy of 660 Mev. Vest.AN Kazakh.SSR 16 no.2:32-43
Ag '69. (MIRA 13:9)
(Nuclei, Atomic) (Protons)

TLEUBERGENOVA, G.A., kand.fiziko-matematicheskikh nauk; MOROZOVA, P.V.

Inelastic interaction of protons with the nuclei of a photographic
emulsion. Vest.AN Kazakh.SSR 18 no.3:72-76 Mr '62.

(MIRA 15:3)

(Nuclear reactions)

L 18299-65 EWT(m) DIAAP/PSD/ACD/a)-5/APWI/SSP/PSD(gs)/PSD(t)

ACCESSION NR: AP4049163

S/0031/64/000/010/0035/0044

AUTHORS: Tleubergenova, G. A.; Lazareva, T. P.; Morozova, P. V.

TITLE: Investigation of energetic particle formation, with M_p , emitted during
7.5 Bev π -meson interactions with photoemulsion nuclei

SOURCE: AN KazSSR. Vestnik, no. 10, 1964, 35-44

TOPIC TAGS: pi meson product, deuteron, triton, high energy particle, photographic
emulsion, nuclear reaction, photoemulsion, emulsion, CIAI synchrotron-triton

ABSTRACT: The interaction of 7.5 Bev π -mesons with type NIKFI-R photographic
emulsion on the CIAI synchrotron-triton was investigated. The interaction is
accompanied by the emission of neutrons, protons, and slowly charged particles
with kinetic energies up to 10 Mev, and by γ -radiation. This analysis is concerned
with the identification of the primary products of the interaction of π -mesons,
tritons, and deuterons with photoemulsion. The particles which were identified as
by means of the "faded track" method were protons and slow charged particles (neu-
trons). Furthermore, it is shown that the angular $\pi^+ - \pi^-$ dependence was
measured with g_f being measured along the whole track length. As a supplementary
method, particle charge was determined by the γ -electron number, from a

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L 18299-65

ACCESSION NR: AP4049163

Ω_f^* - p β curve. Analogously, in stars with radiation numbers $N_h \geq 2$, formed by 7.5 Bev π -meson energies, 240 deuterons and tritons and 61 doubly-charged particles are found with energies above 25 Mev. The distribution of such stars is represented graphically and tabulated. From these tables, it is concluded that such stars consist of helium, tritium, and helium-carbon and other helium and different stars consisting of helium, tritium, and helium-carbon are all alike and differ substantially from typical stellar matter. It is also mentioned that a fair number of stars formed particles with $M > M_p$. Curves are given of cumulative distributions of stars formed particles with $M > M_p$.

Cumulative distributions of angular and energy distributions of these high energetic particles with $M > M_p$. Angular and energy distributions of these particles with $M > M_p$ are found to be almost very well, pointing out the similarity in the mechanism of complex nucleon group formations by nuclear splitting. Finally, the mass distributions of particles produced by 7.5 Bev π -mesons are tabulated for values of $E \geq 25$ and 50 and are found to be close to π -mesons and some particles formed by 3 Bev primary protons. Orig. art. has: 8 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00
SUB CODE: NP, ES
Card 2/2

NO REF SOV: 010

ENCL: 00
OTHER: 010

21012

S/058/61/000/005/020/050

A001/A101

24.6600

AUTHORS:

Morozova, P.V., Tleubergeranova, G.A., Khapilin, V.N.

TITLE:

Interaction of 660-Mev protons with nuclei of light and heavy elements of the photoemulsion.

PERIODICAL:

Referativnyy zhurnal. Fizika, no 5, 1961, 99-100, abstract 5B⁴³³
("Uch. zap. Alma-Atinsk. gos. ped. in-t, 1959, (1959), v 12, no 2,
172-187)

TEXT: Stars produced by 660-Mev protons in nuclei of light (C, N and O) and heavy (Ag and Br) elements were studied with the aid of НИКФИ (NIKFI) photoemulsion. The total effective cross section was determined for inelastic interactions of protons with nuclei of the emulsion. Differential cross sections agree with that calculated on the basis of the optical nucleus model. Recsil protons formed in light nuclei possess higher energies than protons from heavy nuclei. The study of angular distribution of cascade particles has shown the preferential forward directional flux in light nuclei.

[Abstracter's note: Complete translation.]

Card 1/1

S/031/62/000/CC3/001/CC2
B152/B102

AUTHORS: Tleubergenova, G. A. Candidate of Physico-mathematical Sciences, Morozova, P. V.

TITLE: Inelastic interaction of protons with photoemulsion nuclei

PERIODICAL: Akademiya nauk Kazakhskoy SSR. Vestnik, no. 3 (204), 1962, 72-76

TEXT: Using a proton beam from the synchrocyclotron of the Ob"yedinennyj institut yadernykh issledovaniy (Joint Institute of Nuclear Research) at Dubna, the authors investigated nuclear disintegrations in a photoemulsion. They analysed the stars with respect to number and density of the tracks. With 9-Bev protons 79 disintegrations of light nuclei and 890 of heavy nuclei were discovered. These results including the angular distribution agree well with the values measured by V. S. Barashenkov, V. A. Belyakov, Wang-Shu Fen et al. (Mekhanizm vzaimodeystviya bystrykh protonov s nuklonami i yadrami (The interaction mechanism of fast protons with nucleons and nuclei), R-331, Dubna, 1959). Only with protons of more than 5 Bev can total nuclear disintegration be achieved. According to Zh. S.

Card 1/2

Inelastic interaction of ...

S/031/62/000/003/001/002
B152/B102

Takibayev, (Doklady AN SSSR, v. 127, no. 1, 1959) this may be related to the generation and following annihilation of antinucleons. For a primary energy < 9 Bev the secondary charged fast particles formed, whose energy is 3.5 ± 0.5 Bev, caused 34 disintegrations of light nuclei of total of 409. As the multiplicity of generation of secondary charged particles gradually increases when the proton energy is increased to < 9 Bev, cascade mechanism is suggested. Along with this effect the contribution of slow charged particles ($E < 30$ Mev) to the intranuclear process falls off. There are 5 tables and 8 references: 4 Soviet and 4 non-Soviet. The four references to English-language publications read as follows: R. E. Cavanaugh, D. M. Haskin and M. Schein, Bull. Amer. Phys. Soc., v. 30, no. 7, 36, 1955; C. G. Bernardini, E. T. Booth, and S. J. Lindenbaum, Phys. Rev., 88, 1017-1026, 1952 and 85, 826-834, 1952; W. O. Lock, P. V. March, H. Muirhead and W. G. Rosser, Proc. Roy. Soc., A 230, no. 1181, 215, 1955; R. McKeague, Proc. Roy. Soc. Series A, no. 1204, 236, 1956.

Card 2/2

TLEUBERGENOVA, G.A.; LAZAREVA, T.P.; MOROLOVA, P.V.

Studying the formation of high-energy particles with $M > M_P$ emitted during the interaction of 7.5 Bev π^- -mesons with the nuclei of photographic emulsions. Vest. AN Kazakh. SSR 20 no.10:35-44 O '64.
(MIRA 17:11)

L 26769-66 EWT(m)

ACC NR: AP6017445

SOURCE CODE: UR/0361/65/000/002/0046/0050

AUTHOR: Takibayev, Zh. S.; Tleubergenova, G. A.; Lazareva, T. P.

35

B

ORG: none

TITLE: Formation of high energy fragments under the influence of 7.5 Bev pi-mesons
19

SOURCE: AN KazSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 2, 1965, 46-50

TOPIC TAGS: pi meson, nucleon, particle interaction, photographic emulsion, particle

accelerator, angular distribution

ABSTRACT: In this article are presented the results from analysis of 101 interactions with fragments $z \geq 3$ and an energy of 5 Mev per nucleon, in which there were 58 Li, 22 Be, and 11 B Fragments. To obtain these high energy cases a photoemulsion layer of the NIKFI (All-Union Scientific Research Institute for Motion Pictures and Photography)-R 400 μ type 10X20 cm in area was bombarded with 7.5 Bev n-mesons in a synchrophasotron of the Joint Institute of Nuclear Research. Energy, charge, and angular distribution curves for the fragments are presented and comparisons made with theoretical calculations based on vaporization, fission, etc. The correlation between the asymmetry of the fragments and cascade particles and, especially, the observation of an increase in the asymmetry of black tracks in stars with fragments by comparison with the asymmetry in stars without fragments leads to the conclusion that the cascade process is primarily responsible for the formation of high energy fragments. Orig. art. has: 4 figures and

3 tables. [JPRS]

SUB CODE: 20 / SUBM DATE: 17Nov64 / ORIG REF: 010 / OTH REF: 003

Card 1/1 *pls*

2

L 26782-66 EWT(1)/EWT(m)/T/FSS-2 IJP(c) JD

ACC NR: AP6017446

SOURCE CODE: UR/0361/65/000/002/0051/0059

AUTHOR: Takibayev, Zh. S.; Tleubergenova, G. A.; Lazareva, T. P.; Morozova, P. V.; Kazanskaya, A. P.

ORG: none

TITLE: Helium¹ particles emitted during the collision of 17.5 Bev pi-mesons with the nuclei of a photoemulsion

SOURCE: AN KazSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 2, 1965, 51-59

TOPIC TAGS: pi meson, photographic emulsion, helium

ABSTRACT: The article is a discussion of an experiment conducted for the investigation of the emission of multi-nucleon particles from splitting of nuclei under the influence of high energy π -mesons. In the experiment the interaction of primary π -mesons 17.5 Bev in energy with the nuclei of a photoemulsion to form helium particles with a kinetic energy greater than 100 Mev is studied. An Ilford-G5 emulsion 600 μ in thickness was used. Distributions and characteristics of the particles are presented. The significant increase in the average number of grey tracks ($\sim 25\%$) for stars with helium particles by comparison with splits where no energy helium particles were present, the constancy of the energy spectrum of the helium particles during significant

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